

REMARKS

1. Claim Rejections – 35 U.S.C. 103(a)

Claims 1, 5 – 7, 9, 13 – 14, 18, 20 and 24 – 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al. in view of Koishi et al.

5 **Response**

Claim 1

Applicant firstly points out that, in the Office action of 2007/5/22, the Examiner has interpreted the word “procedure” used by the Applicant in claims 1, 7, and 18 to be equivalent to the word “period” in the rejection of said claims. See Examiner’s remarks in
10 the Response to Arguments section stating, “Applicant has added an extra limitation of the constant being ‘obtained according to an identification procedure’ to the claims 1,7, and 18. However, the identification period is not defined in the claims. Thus the examiner interprets this to be the initial state/stage of the system” (*emphasis added*).

15 Applicant respectfully points out that a ‘period’ such as an initial state/stage of the system is not the same thing as an ‘identification procedure’, which has active steps as illustrated in Fig.18 and is explained in the corresponding description. A period is well known to be a chronological division or an interval of time required for a cyclic motion or phenomenon to complete a cycle and begin to repeat itself. In this way, an initial
20 state/stage of the system is an initial period. However, a procedure is well known to be defined as a particular way of accomplishing something or of acting, or a series of steps followed in a regular definite order such as a set of instructions for a computer that can be called into action. In this way, applicant asserts that the identification procedure claimed by the present invention in claims 1, 7, and 18 should be interpreted in light of the
25 specification and figures (see Fig.18 and corresponding specification for example) and should not be found equivalent to an initial state (i.e. initial period) of the system. For at

least this reason, independent claims 1, 7, and 18 should be found allowable with respect to the cited references.

Claim 1 has been amended to state that the output signal is adjusted to generate a
5 multiplied output signal and that the proportional constant used to adjust the output signal
is obtained independently of the multiplied output signal. As the Examiner stated in the
advisory action dated March 6th 2007, the transfer function of the operational amplifier of
Ota gives $V_{out} = G(V_{in} - K V_{out})$ where V_{out} is the output of the op-amp, and the
proportional constant $= G/(1 + GK) = V_{out}/V_{in}$. As can clearly be seen from this equation,
10 the proportional constant of Ota is not obtained independently of the op-amp output.
Furthermore, as is well known in the art, an op-amp feeds back the output signal to its
input, therefore the proportional constant utilized to multiply the output signal of the
sampling holding circuit contains an element of the multiplied output signal (the output of
the op-amp) and is not "obtained independently of the multiplied output signal" as stated
15 in currently amended Claim 1. The applicant therefore states that an operational amplifier
does not achieve the same purpose as "multiplying the output of the sample and hold
circuit with a proportional constant" as claimed in Claim 1.

Ota claims a peak detecting circuit that detects the peak level of an output signal,
inputs said peak level to the sampling holding circuit, and then **continues** to monitor the
20 power level of the output signal: "Immediately after the start of recording, the voltage
signal supplied by the peak detecting circuit 5 and the voltage signal held by the sampling
holding circuit 65 are equal, and the signal 37 is at the zero level. As the recording of
information is continued, the temperature of the semiconductor laser 16 rises and the laser
power supplied by the semiconductor laser 16 drops. Then, as the level of the voltage
25 signal supplied by the peak detecting circuit 5 drops, the level of the signal 37 supplied by
the operational amplifier 66 varies" [Para 0051]. In short, the peak detecting circuit does
not have the function of the peak-hold circuit of Claim 1, which detects **and holds** the

peak level of an output signal: "The term "peak-hold circuit" in this disclosure is defined as a device capable of acquiring and holding a voltage reflecting a portion of an electrical signal having maximum amplitude or a device capable of acquiring and holding a voltage reflecting a portion of an electrical signal having minimum amplitude" [Para 0036].

5 Furthermore, it is not obvious to replace the peak detecting circuit of Ota with the peak-hold circuit of Claim 1, as Ota teaches using the output of the peak detecting circuit to monitor **changes** in the output signal, therefore only holding the peak level of the output signal would defeat the purpose of Ota's teachings as no temperature change would ever be detected, and therefore such a combination is unreasonable.

10 The invention disclosed in Claim 1 utilizes a reset signal to reset the output of the peak-hold circuit, as the peak-hold circuit holds a peak power level of the output signal, which may vary during the sampling period. Therefore, resetting is necessary. Ota, however, continuously monitors the output signal power level, and does not need to actively reset the detected power level as said detected power level represents a current
15 power level. Therefore, applicant asserts that there is no motivation to combine the reset signal of Koishi with the system of Ota, and furthermore, that such a combination would not teach the system disclosed in Claim 1.

For these reasons, applicant asserts that Claim 1 should be found allowable over the prior art.

20 Claims 5 – 6

Claims 5 – 6 are dependent on Claim 1 and should therefore be found allowable for at least the same reasons provided above for base Claim 1.

Claim 7

25 Claim 7 has been amended to include the same limitations as those added to Claim 1, namely that the peak-hold circuit detects **and holds** a peak level of the output signal, and

that the proportional constant is obtained independently of the multiplied output signal. For the reasons detailed in the above response to Claim 1, the applicant asserts that Claim 1 should be found allowable.

Claims 9 and 13 – 14

- 5 Claims 9 and 13 – 14 are dependent on Claim 7 and should therefore be found allowable if Claim 7 is found allowable.

Claim 18

- 10 Claim 18 has been amended to include the limitation that the proportional constant is obtained independently of the multiplied output signal. Furthermore, the previously presented version of Claim 18 had the limitation of “utilizing a peak-hold circuit to acquire, **hold**, and output a maximum voltage of the sensed power level signal” (*emphasis added*). For the reasons detailed in the response to Claim 7, the applicant asserts that Claim 18 should be found allowable.

Claims 20 and 24 – 25

- 15 Claims 20 and 24 – 25 are dependent on Claim 18 and should be found allowable if Claim 18 is found allowable.

Claims 2 – 4, 10 – 12 and 21 – 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al. in view of Shiozaki et al.

Response

- 20 Claim 2

Claim 2 has been amended to correct for the repeated word “diode”. Claim 2 discloses a switch for controlling transmission of a power level signal to the peak-hold circuit. As detailed in the response to Claim 1, Ota utilizes a peak detecting circuit to

continuously detect a power level of the output signal in order to measure **a change** in the output signal power level. Therefore, it is unreasonable for Ota to utilize the switch of Shiozaki to minimize the amount of time the output signal is monitored. Furthermore, Claim 2 is dependent on Claim 1. As the applicant believes Claim 1 has been placed in a position for allowance, Claim 2 should also be found allowable.

Claims 3 – 4

Claims 3 – 4 are dependent on Claim 1 and should be found allowable if Claim 1 is found allowable.

Claim 10

10 Claim 10 contains similar limitations to Claim 2, namely that a switch is utilized for controlling transmission of a power level signal to the peak-hold circuit. For the reasons detailed under the response to Claim 2, the applicant believes that Claim 10 should be found allowable. Furthermore, Claim 10 is dependent on Claim 7. As the applicant believes Claim 7 has been placed in a position for allowance, Claim 10 should also be found allowable.

Claims 11 – 12

Claims 11 – 12 are dependent on Claim 7 and should be found allowable if Claim 7 is found allowable.

Claim 21

20 Claim 21 has been amended to correct for the repeated word “diode”. Claim 21 contains similar limitations to Claim 2, namely that a switch is utilized for controlling transmission of a power level signal to the peak-hold circuit. For the reasons detailed under the response to Claim 2, the applicant believes that Claim 21 should be found

allowable. Furthermore, Claim 21 is dependent on Claim 18. As the applicant believes Claim 18 has been placed in a position for allowance, Claim 21 should also be found allowable.

Claims 22 – 23

- 5 Claims 22 – 23 are dependent on Claim 18 and should be found allowable if Claim 18 is found allowable.

Claims 8 and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al. in view of Eguchi et al.

10 Response

Claim 8

Claim 8 is dependent on Claim 7 and should therefore be found allowable if Claim 7 is found allowable.

Claim 19

- 15 Claim 19 is dependent on Claim 18 and should therefore be found allowable if Claim 18 is found allowable.

2. Allowable Subject Matter

Claims 15 – 17 and 31 – 36 were deemed allowable by the Examiner. The applicant is grateful for the allowance.

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Conclusion:


Thus, all pending claims are submitted to be in condition for allowance with respect to

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the cited art for at least the reasons presented above. The Examiner is encouraged to telephone the undersigned if there are informalities that can be resolved in a phone conversation, or if the Examiner has any ideas or suggestions for further advancing the prosecution of this case.

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Sincerely yours,



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15 Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)